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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/431,365	11/01/1999	CARL G DEMARCKEN	09765/021001	8582

7590 01/03/2002

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EXAMINER

PORTER, RACHEL L

ART UNIT

PAPER NUMBER

2166

DATE MAILED: 01/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

H.G.

# Office Action Summary

Application No.

09/431,365

Applicant(s)

DEMARCKEN, CARL G

Examiner

Rachel L. Porter

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2166

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 November 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 November 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Other: *See Continuation Sheet*.

### DETAILED ACTION

Claims 1-2 are pending.

#### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include several reference sign(s) not mentioned in the description. Examples of such reference numbers include but are not limited to: "30" (figure 1); "104" and "106" (figure 5); "88a", "90", "92", and "96" (Figure 4A and 4B). The examiner requests applicant's cooperation in identifying and correcting other such examples in the submitted drawings. Proposed drawing corrections, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include several reference sign(s) mentioned in the description. Examples included but are not limited to the following reference numbers: "34" page 5, line 5; "304e" page 26, line 4 and throughout specification, "306a" page 32, line 4; "360" page 40, line 19. The examiner requests applicant's cooperation in identifying and correcting other such examples throughout the specification. Proposed drawing corrections or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because in several instances, multiple reference characters have been used to designate the same part throughout the drawings and the specification. Examples of this include but are not limited to the following:

- "56" (page 7, line 8) and "58" (fig. 2) have both used to refer to the availability system
- "306" (page 25 line 13) and "304"(fig. 6) have both been used to refer to the value function in figure 6.
- "304"(page 25, line 13) and "304" (fig. 6) have both been used to refer to a process in figure 6.

The examiner requests applicant's cooperation in identifying and correcting other such examples throughout the specification and drawings. Proposed drawing corrections, corrected drawings or amendment to the specification are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "40" has been used to designate both a display (fig.1) and a client (page 8, line 13). Also, "366" has been used to designate both a "select first requirement" step in Figure 9 and the "initialize set to be empty" step in Figure 12. Proposed drawing corrections, corrected drawings, or amendment to the specification are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

5. The title of the invention is not descriptive. The title refers to a method but the claims are directed to a system. A new title is required that is clearly indicative of the invention to which the claims are directed.

6. The disclosure is objected to because of the several informalities/errors.

Examples of these errors include but are not limited to the following:

- Figure 10A is referenced (page 42, line 23) but no such figure is disclosed
- page 19, line 5 refers to figure 5 but describes reference numbers found in Fig. 6.
- "applies" is misspelled "applys" on page 42, line 6.
- "72" (page 42, line 14) describes the process found in step "372"

The examiner requests applicant's cooperation in identifying and correcting other such examples throughout the specification and drawings.

### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In reference to claim 1, it is unclear whether the applicant intends to a claim a

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system or a method. The applicant claims a travel planning system with an intended use (method/process), but the applicant fails to recite essential system components. Furthermore, if the applicant intends to claim a method/process, the claim must recite essential steps of the method/process. Claim 2 is dependent on claim 1 and is therefore rejected on the same premise and using the same rationale applied to the rejection of claim 1.

For the purpose of examination only, the examiner will interpret claims 1 and 2 as system claims for intended use with a travel planning method.

8. While applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "graph" in claim 2 is used by the claim to mean "flow chart " while the accepted meaning is "diagram that exhibits a relationship, often functional, between two sets of numbers as a set of points having coordinates determined by the relationship<sup>1</sup>" or "a pictorial device, such as a pie chart or bar graph, used to illustrate quantitative relationships. " (See Attachment)

For the purpose of examination only, the examiner will interpret the phrase "pricing graph" to mean a flow chart used to illustrate the relationships between the various travel options. (as illustrated in figures 3A and 3B of the instant application)

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***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

10. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by DeMarcken et al (US Patent No. 6,295,521).

In reference to claim 1, DeMarcken et al teach a travel planning system that outputs a smaller set of travel options from a larger computed set of options by pruning the larger set into a smaller set with a diversity-based pruning method and wherein the larger set is represented by a compact representation. (column 5, lines 26-37)

In reference to claim 2, DeMarcken et al teach the travel planning system of claim 1 wherein the compact representation is a pricing graph. ( column 5, lines 47-53)

11. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by O'Brien (US Patent No. 5,832,453).

O'Brien teaches a travel planning system/method that outputs a set of travel options smaller than the complete set of travel options it has computed (column 11, lines 39-53; column 5, lines 1-4). O'Brien teaches a travel planning system wherein a larger set of options is reduced to produce the smaller set of travel options using a diversity-based pruning method. (column 7, lines 13-23). O'Brien teaches a method/system wherein the larger set of data is represented by a compact representation. (figure 5; column 6, lines 31-42) In the system/method taught by O'Brien, the system processes travel information from several sources and produces a best travel option from the larger set of options. To reduce the larger set of travel options, a number of constraints are considered and calculated. (i.e. a diversity-based pruning method) Furthermore, the larger set of travel options is displayed in a table/chart (i.e. compact representation).

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien (US Patent No. 5,832,453).

O'Brien teaches a travel planning system of claim 1 wherein the larger set of travel options is represented by a compact representation. O'Brien does not teach that



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the compact representation is the claimed "pricing graph." (as shown in Figures 3A and 3B of the instant application). O'Brien does teach a compact representation that is a chart which displays various travel options and serves the same function as the claimed "pricing graph." (a chart) At the time of the applicant's invention, it would have been obvious to modify the system/method taught by O'Brien to display the travel options as flow chart. One would have been motivated to do this make the information easier to understand.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Webber et al (US Patent No. 5,331,546) teach a travel planning system in which several travel options are generated, sorted and displayed in a pricing table.
- Whitesage (US Patent No. 5,191,523) teaches a system and method for calculating and comparing travel costs on a per-unit basis.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel L. Porter whose telephone number is 703-305-0108. The examiner can normally be reached on M-F, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone numbers for

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the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

RP

December 28, 2001

Attachment enclosed:

*The American Heritage® Dictionary of the English Language*, 3<sup>rd</sup> Edition, (definition of "graph")



TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

# **Attachment**

# graph<sup>1</sup>

**graph** (grăf) *noun*

1. A diagram that exhibits a relationship, often functional, between two sets of numbers as a set of points having coordinates determined by the relationship. Also called *plot*.
2. A pictorial device, such as a pie chart or bar graph, used to illustrate quantitative relationships. Also called *chart*.

*verb, transitive*

**graphed, graph-ing, graphs**

1. To represent by a graph.
2. To plot (a function) on a graph.

[Short for *graphic formula*.]

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TARIQ B. HAFIZ  
SUPERVISORY PATENT EXAMINER  
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Continuation of Attachment(s) 6). Other: American Heritage Dictionary, "graph" definition.